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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/668,199

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Tamaki Nakamura

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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

PETERSON, CHRISTOPHER K

ART UNIT

PAPER NUMBER

2622

NOTIFICATION DATE

DELIVERY MODE

12/28/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/668,199	Applicant(s) NAKAMURA, TAMAKI	
	Examiner CHRISTOPHER K. PETERSON	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/26/2009 has been entered. Claims 1 and 7 have been amended.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 3, 5, and 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (US Patent Pub. 2002/0001395) in view of Parulski (US Patent Pub. # 2003/0058354) and further in view of Kawai (US Patent Pub. # 2002/0030675).

As to claim 1, Davis teaches an electronic apparatus for obtaining and memorizing image data representing an image and displaying the image represented by the image data thus memorized, comprising:

Art Unit: 2622

- a communications section (transceiver 52) that externally obtains image data having a filename and representing an image (Para 40 – 42);
- a controller (CPU 22) that analyzes information attached to the filename and the image data, extracts the information as attributes of the image data, and produces, from the image data, thumbnail image data representing a thumbnail image (Para 35 and 95 - 97). Davis teaches a stereographic encoder may be located within the camera. Davis teaches the encoder converts auxiliary data to be embedded in the image into watermark signal and combines the watermark signal with the image. This auxiliary data may include one or more references, a machine instruction or set of instructions, and other data items about the image (Para 96).
- a first memory (memory subsystem 20) that memorizes, as a single file, the image data, the attributes of the image data (Para 38). Davis teaches the memory subsystem 20 includes a combination of ROM, RAM, and removable storage devices such as a flash memory card.
- a second memory (metadata server) that is provided separately from the first memory (20) and further memorizes the attributes of the image data (Para 105). Davis teaches the auxiliary data associated with the image can be maintained separately from the image.
- a display section (display 24) that displays the image represented by the image data in a two dimensional mode or a three dimensional mode

according to whether dimensional information included in the attributes memorized in the second memory represents a two dimensional image or a three dimensional image (Para 39 and 177). Davis teaches metadata in images also applies to other media signals, including audio, and video signals, and computer graphics models (e.g., two-dimensional, three-dimensional graphical models and animation) (Para 177).

Davis does not teach the storing of a thumbnail image data of the image. Parulski teaches wherein the memory (memory 50) further stores a thumbnail image data (low resolution thumbnail version) of image (Para 25). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the low resolution thumbnail version of the image as taught by Parulski to the host computer of Davis, because using a standard, "finished" image file format so that the images can be used by many applications, yet also enables image processing from raw camera data to final output data to be completed in a single, integrated process, to provide improved image quality when printing (Para 12 of Parulski).

Davis in view of Parulski do not specifically teach a three dimensional mode for stereoscopic view. Kawai teaches a display image generating block for generating a display image from three-dimensional image data and also includes a device information acquiring block for acquiring device information associated with a display device (Abstract). Kawai teaches a display section (first and second database clients 1a and 1b) that displays the image represented by the image data in a two dimensional mode (2d mode) or a three dimensional mode (3D Mode) for stereoscopic view utilizing

Art Unit: 2622

image data for left eye (left perspective image data) and image data for right eye(right perspective image data), respectively, according to whether dimensional information (data ID 22a, 27, 29 of Fig. 3B-D) included in the attributes memorized in the second memory represents a two dimensional image or a three dimensional image (Para 52 – 57). Kawai (Fig. 2) illustrates a table representing stereoscopic image formats. In this table, a format ID is assigned to each stereoscopic image format. One of the data IDs is written in a data response packet, which will be described later, and the data response packet is transmitted from the 3D database server 3 to the first or second database client 1a or 1b. Kawai teaches six different ways of producing a 3D image and can also produce a 2D image. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a 2D/3D convertible display as taught by Kawai to the host computer of Davis in view of Parulski, to provide an image display control system capable of displaying a stereoscopic image in an optimum manner regardless of the characteristics of a stereoscopic display device (Para 23 of Kawai).

As to claim 2, Davis teaches further comprising: wherein the communications section (52) obtains the image data via the Internet (Para 51). Davis teaches the camera 100 is connected to a network 102, such as the Internet, and another device, such as a server 108, sends the information through the network to the camera, which is connected to the network (Para 51).

As to claim 3, Davis teaches further comprising: a camera (camera 10) for photographing the image so that the image data is obtained by the camera (Para 32 and 33).

As to claim 5, Davis teaches the electronic apparatus as claimed in claim 1, wherein the attributes of the image data further include a type of the image (Para 115), an attribute of copyright for the image (Para 116), the filename of the file (picture identifiers, e.g., industry or application specific identifiers Para 120), and an image size expressed in numbers of pixels constituting the image in horizontal and vertical directions respectively (Para 113 and 130). Davis teaches image data framework described above supports a variety of different data types. Davis teaches the resolution is defined under two places. Examiner analyzes resolution to mean the image size along with the horizontal and vertical directions.

As to claim 6, Davis teaches wherein the image includes an image for electronic animation (computer graphics models (e.g., two-dimensional, three-dimensional graphical models and animation)) (Para 177).

As to claim 7, Davis teaches an electronic apparatus for obtaining and memorizing image data representing an image and displaying the image represented by the image data thus memorized, comprising:

- a communications section (transceiver 52) that externally obtains image data having a filename and representing an image (Para 40 – 42);
- a controller (CPU 22) that analyzes information attached to the filename and the image data, extracts the information as attributes of the image

data, and produces, from the image data, thumbnail image data representing a thumbnail image (Para 35 and 95 - 97). Davis teaches a stereographic encoder may be located within the camera. Davis teaches the encoder converts auxiliary data to be embedded in the image into watermark signal and combines the watermark signal with the image. This auxiliary data may include one or more references, a machine instruction or set of instructions, and other data items about the image (Para 96).

- a first memory (memory subsystem 20) that memorizes, as a single file, the image data, the attributes of the image data (Para 38). Davis teaches the memory subsystem 20 includes a combination of ROM, RAM, and removable storage devices such as a flash memory card.
- a second memory (metadata server) that is provided separately from the first memory (20) and further memorizes the attributes of the image data (Para 105). Davis teaches the auxiliary data associated with the image can be maintained separately from the image.
- a display section (display 24) that displays the image represented by the image data in a two dimensional mode or a three dimensional mode according to whether dimensional information included in the attributes memorized in the second memory represents a two dimensional image or a three dimensional image (Para 39 and 177). Davis teaches metadata in images also applies to other media signals, including audio, and video

signals, and computer graphics models (e.g., two-dimensional, three-dimensional graphical models and animation) (Para 177).

Davis does not teach the storing of a thumbnail image data of the image. Parulski teaches wherein the memory (memory 50) further stores a thumbnail image data (low resolution thumbnail version) of image (Para 25). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the low resolution thumbnail version of the image as taught by Parulski to the host computer of Osaka, because using a standard, "finished" image file format so that the images can be used by many applications, yet also enables image processing from raw camera data to final output data to be completed in a single, integrated process, to provide improved image quality when printing (Para 12 of Parulski).

Davis in view of Parulski do not specifically teach a three dimensional mode for stereoscopic view. Kawai teaches a display image generating block for generating a display image from three-dimensional image data and also includes a device information acquiring block for acquiring device information associated with a display device (Abstract). Kawai teaches a display section (first and second database clients 1a and 1b) that displays the image represented by the image data in a two dimensional mode (2d mode) or a three dimensional mode (3D Mode) for stereoscopic view utilizing image data for left eye (left perspective image data) and image data for right eye(right perspective image data), respectively, according to whether dimensional information (data ID 22a, 27, 29 of Fig. 3B-D) included in the attributes memorized in the second memory represents a two dimensional image or a three dimensional image (Para 52 –

Art Unit: 2622

57). Kawai (Fig. 2) illustrates a table representing stereoscopic image formats. In this table, a format ID is assigned to each stereoscopic image format. One of the data IDs is written in a data response packet, which will be described later, and the data response packet is transmitted from the 3D database server 3 to the first or second database client 1a or 1b. Kawai teaches six different ways of producing a 3D image and can also produce a 2D image. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a 2D/3D convertible display as taught by Kawai to the host computer of Davis in view of Parulski, to provide an image display control system capable of displaying a stereoscopic image in an optimum manner regardless of the characteristics of a stereoscopic display device (Para 23 of Kawai).

Davis in view of Parulski do not teach the controller is capable of generating three dimensional image data from the image data representing a two dimensional image. Kawai teaches a stereoscopic display device other than the device designed to display two-viewpoint images, such as a hologram device, is used, a 2D scene is rendered or converted into a data format suitable for that stereoscopic display device, and the resultant data is returned (Para 83). Kawai (Fig. 9) teaches if the image data represents a two dimensional image (2D), the controller (control signal) is capable of generating three dimensional image data from the image data representing a two dimensional image by extracting every other set among sets (odd and even fields) each comprising R pixel data, G pixel data, and B pixel data from the image data so as to make image data for a left eye, and, then, image data for a right eye is produced by

Art Unit: 2622

positioning each set comprising R pixel data, G pixel data, and B pixel data included in the image data for the left eye in such a way that the closer said each set is situated to either of right and left ends in a horizontal direction, the more said each set is shifted towards the right end (Para 80 and 83). Kawai teaches (FIG. 18C) a page-flipping format, the image data is regarded as to represent a single large-size image obtained by combining two images, and the image is separated into the original two images by a receiving device (Para 81). Kawai teaches the page-flipping format, as shown in FIG. 18C, a left image L and a right image R are displayed alternately in terms of time (Para 13).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (US Patent Pub. 2002/0001395) in view of Parulski (US Patent Pub. # 2003/0058354), further in view of Kawai (US Patent Pub. # 2002/0030675), and further in view of Wada (US Patent # 6,965,413).

As to claim 4, Davis teaches an audio capture device may be adapted to insert a stereographic link in one or more audio segments as the audio signal is being captured, or shortly thereafter, before the encoded signal is transferred from the device (Para 179) and camera may also include a cellular or conventional modem 54 for transferring data to and from a telephone network (Para 43). Davis does not specifically teach an input section for inputting audio; an output section for outputting audio. Wada reference cites a foldable portable terminal unit containing a picture taking device capable of transmitting both image and voice. Wada (Fig. 6) teaches an input section for inputting

Art Unit: 2622

audio (receiver 15) (Col. 2, lines 55 – 58); an output section for outputting audio (speaker 13) (Col. 2, lines 55 – 58); and a communications section for transmitting and receiving audio (voice codec section 19, transmission controller 20 and network interface 21) (Col. 4, lines 12 – 19), wherein the electronic apparatus (mobile phone 1) functions as a telephone (1) Col. 2, lines 51 – 61). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a communications section for connecting to the Internet and obtaining the image data as taught by Wada to the host computer of Davis in view of Parulski and further in view of Kawai, because the display device disposed in the lid portion is constructed to be foldable and rotatable freely with the picture taking camera fixed in the case main body. Thus, by rotating or folding the lid portion corresponding to his or her own image or an image of an outside object taken with the picture taking camera, user can monitor that image with the display device in a state suitable for taking picture. Further, reduction of the size thereof is achieved, so that a portable terminal unit convenient for carrying can be provided (Col. 5, lines 45 – 55 of Wada).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Divelbiss (US Patent Pub. #2003/0095306) cites a stereoscopic image demultiplexer for VGA computer adapter signals.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER K. PETERSON whose telephone number is (571)270-1704. The examiner can normally be reached on Monday - Friday 6:30 - 4:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Sinh can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. K. P./
Examiner, Art Unit 2622
12/15/2009

/Sinh Tran/
Supervisory Patent Examiner, Art Unit 2622